



BIGHORN-DESERT VIEW WATER AGENCY

Our Mission - "To provide a high quality supply of water and reliable service to all customers at a fair and reasonable rate."

Planning/Legislative/Engineering Grant & Security Standing Committee Meeting Agenda

Committee Members: Vice President Burkhart & President Corl-Lorono

BOARD MEETING OFFICE
1720 N. CHEROKEE TR.
LANDERS, CALIFORNIA 92285

April 21, 2020
Time – 9:15 A.M.

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Please note that all requirements of the Brown Act requiring the physical presence of the board or staff have been waived per Executive Order N-29-20

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
4. APPROVAL OF AGENDA

Discussion and Action Items - The Committee will discuss the following items, and the Committee will consider taking action, if so inclined. The Public is invited to comment on any item on the agenda during discussion of that item. When giving your public comment, please have your information prepared. If you wish to be identified for the record, then please state your name. Due to time constraints, each member of the public will be allotted three minutes to provide their public comment.

5. **Status of Reservoir B1 and B2 Recoating Project**
6. **Community Water Systems Alliance Update**
7. **Prop. 1 / Round 1 Grant Application Update**
8. **Prop. 1 Planning Grant Project Update**
9. **Disadvantaged Community Involvement Grant Update (DACI) Update**
10. **Conference Call with Mojave Water Agency's Legal/Legislative and Public Information Committee**
Committee to participate via teleconference for an update by the State Advocate of Issues at the State Level, as well as an update by the Federal Advocate of Issues at the Federal Level.
11. **Consent Items** – The following items are expected to be routine and non-controversial and will be acted on by the Committee at one time without discussion, unless a member of the Public or member of the Committee requests that the item be held for discussion or further action.

- a. PLEGS Committee Meeting Minutes, **February 18, 2020**

Recommended Action:

Approve as presented (Item a):

12. Public Comment Period

Any person may address the Committee on any matter within the Agency's jurisdiction on items not appearing on this agenda. When giving your public comment, please have your information prepared. If you wish to be identified for the record, then please state your name. Due to time constraints, each member of the public will be allotted three minutes to provide their public comment. State Law prohibits the Committee from discussing or taking action on items not included on the agenda.

13. Verbal Reports - Including Reports on Courses/Conferences/Meetings

1. Committee Members' Comments/Reports
2. General Manager's Report

14. Adjournment

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the Bighorn-Desert View Water Agency, 622 S. Jemez Trail, Yucca Valley, CA not less than 72 hours if prior to a Regular meeting, date and time

above; or in accordance with California Government Code Section 54956 this agenda has been posted not less than 24 hours if prior to a Special meeting, date and time above.

As a general rule, agenda reports or other written documentation have been prepared or organized with respect to each item of business listed on the agenda.

Copies of these materials and other disclosable public records in connection with an open session agenda item, are also on file with and available for inspection at the Office of the Agency Secretary, 622 S. Jemez Trail, Yucca Valley, California, during regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Bighorn-Desert View Water Agency.

Internet: Once uploaded, agenda materials can also be viewed at www.bdvwa.org

Public Comments: You may wish to submit your comments in writing to assure that you are able to express yourself adequately. Per Government Code Section 54954.2, any person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in the meeting, should contact the Board's Secretary at 760-364-2315 during Agency business hours.

Item #5

**Small Water Suppliers and Rural Communities
at Risk of Drought and Water Shortage Vulnerability
and
Recommendations and Guidance to Address the
Planning Needs of these Communities**

**REPORT PURSUANT TO
SECTION 10609.42 OF THE CALIFORNIA WATER CODE**

**Draft
MARCH 2020**



California Department of Water Resources
Water Use Efficiency Branch

Notes: This report developed pursuant to Section 10609.42 of the California Water Code was informed by documents that provide methodology, assumptions, data, estimates, and other information. These supporting documents are provided as appendices in the back of this report.

*Definitions and key concepts used in this report are listed in glossary on page 51. Terms appearing in **purple** refer to **key definitions**; those appearing in **brown** refer to **key concepts**.*

State of California
Gavin Newsom, Governor

California Natural Resources Agency
Wade Crowfoot, Secretary for Natural Resources
Thomas Gibson, Undersecretary
Lisa Lien-Mager, Deputy Secretary for Communications

Department of Water Resources
Karla Nemeth, Director
Cindy Messer, Chief Deputy Director
Michelle Banonis, Assistant Chief Deputy Director

Deputy Directors

Business Operations
Kathie Kishaba

Delta Conveyance
Vacant

Flood Management and
Dam Safety
Gary Lippner

Integrated Watershed
Management
Kristopher A. Tjernell

Statewide Emergency
Management Program
Michael Day

Statewide Groundwater
Management
Taryn Ravazzini

State Water Project
Ted Craddock (Acting)

Office Executives

Office of the Chief
Counsel
Spencer Kenner

Government and
Community Liaison
Anecita Agustinez

Internal Audit Office
David Whitsell

Legislative Affairs Office
Kasey Schimke,
Assistant Director

Public Affairs Office
Erin Mellon,
Assistant Director

Office of Workforce Equality
Stephanie Varrelman

Division of Regional Assistance
Office of the Chief
Arthur Hinojosa

County Drought Advisory Group Project Team

Department of Water Resources

Water Use Efficiency

Fethi Benjemaa
Nirmala Benin
James Campagna

Climate Change Program

Julia Ekstrom

California Water Plan

Jose Alarcon

State Water Resources Control Board

Division of Drinking Water

Betsy Lichti
Michelle Frederick
Joseph Crisologo

Office of Research, Planning and Performance

Kathy Frevert

Office of Environmental Health Hazard Assessment

Air and Climate Epidemiology Branch

Carolina Balazs

County Drought Advisory Group Members

Calaveras County Water District

Joel Metzger, Peter Martin

California Association of Local Agency Formation Commissions

Michael McGill, Pamela Miller,
Christina Crawford

California Association of Mutual Water Companies

Adan Ortega, Dave Michalko

California Municipal Utilities Association

Danielle Blacet, Jonathan Young

California Rural Water Association

Dustin Hardwick, Tom Keegan

California State Association of Counties

Bruce Gibson, Nick Cronenwett,
Cara Martinson

California Water Association

Jack Hawks

California Water Institute at Fresno State

Thomas C. Esqueda

Community Water Center

Jonathan Nelson, Patricia Avila

County of Napa

Christopher M. Silke

County of San Luis Obispo

Courtney Howard, Mladen Bandov

EKI Environment & Water Inc.

Jacques DeBra

El Dorado County Water Agency

Kenneth V. Payne, Kyle Ericson

Environmental Justice Coalition for Water

Colin Bailey, Karen McBride

Indian Health Services

Chris Brady, Jonathan Rash

La Posta Tribe

James "Potts" Hill

Lake County

Jan Coppinger

County Drought Advisory Group Members (continued)

Local Government Commission

Danielle Dolan, Atley Keller,
Emily Finnegan

Mojave Water Agency

Nicholas Schneider, Lance Eckhart

Office of John S. Mills

John S. Mills

Pacific Institute

Laura Feinstein, Cora Kammeyer

Pechanga Tribal Government

Eagle Jones

Rural Community Assistance Corp

Ari Neumann, Rachel Smith

Rural County Reps of California

Mary-Ann Warmerdam

San Bernardino Valley Water District

Timothy Kellett, Ron Merckling

Santa Clara Valley Water District

Jerry De la Piedra
Vanessa De la Piedra

Self-Help Enterprises

Jessi Snyder, Tami McVay

Stanford University

Newsha Ajami

Tulare County Resource Management Agency

Ross W. Miller

Tule River Indian Tribe of California

Joe Boy, David Perez

Watershed Progressive

Regina Hirsch, Sean Hembree

Wheeler Institute (UC Berkeley School of Law)

Nell Green Nysten

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Abbreviations and Acronyms

AB	Assembly Bill
AWWA	American Water Works Association
CAL OES	California Office of Emergency Services
CDAG	County Drought Advisory Group
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CPUC	California Public Utilities Commission
CWC	California Water Code
DDW	State Water Resources Control Board Division of Drinking Water
DWR	California Department of Water Resources
GSA	groundwater sustainability agencies
HSC	California Health and Safety Code
IHS	Indian Health Services
LHMP	local hazard mitigation plan
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor’s Office of Planning and Research
SADWF	Safe and Affordable Drinking Water Fund
SB	Senate Bill
State Water Board	State Water Resources Control Board
WSCP	water storage contingency plan

Executive Summary

This report is submitted pursuant to CWC Section 10609.42 which directs DWR to identify **small water suppliers** and rural communities that may be at risk of **drought** and **water shortage vulnerability** and propose recommendations and information in support of improving the **drought** preparedness of **small water suppliers** and rural communities.

Specifically, Section 10609.42 requires:

1. DWR, in consultation with the State Water Resources Control Board (State Water Board) and other relevant State and local agencies and stakeholders, identify **small water suppliers** and areas of households on private supplies (termed “rural communities” in the legislation, and also called “**self-supplied communities** in this report”) that may be at **risk** of **drought** and **water shortage**. DWR must then notify counties and groundwater sustainability agencies (GSAs) of suppliers or communities that may be at **risk** within its jurisdiction and may make the information publicly accessible on the website (CWC Section 10609.42[a]).
2. DWR, in consultation with the State Water Board and stakeholders, develop recommendations and guidance relating to the development and implementation of countywide **drought** and **water shortage** contingency plans to address the planning needs of **small water suppliers** and rural communities. The legislation directs DWR to explain how the planning needs of **small water suppliers** and rural communities can be integrated into complementary existing planning processes (CWC Section 10609.42[b]).

To assess **drought** and **water shortage** vulnerability, a methodology for analyzing **risk** was developed and **small water suppliers** and **self-supplied communities** statewide were evaluated for their relative **risk** of **drought** and **water shortage**. Each supplier and community examined received a numeric **risk** score, which is derived from a set of indicators developed from a stakeholder process. Indicators used to estimate **risk** represented three key components: (1) the **exposure** of suppliers and

communities to hazardous conditions and events, (2) the physical and social **vulnerability** of suppliers and communities to the exposure, and (3) recent history of shortage and **drought** impacts. The **risk** scores for individual **small water suppliers** and **self-supplied communities** were calculated separately, using the same methodology but different **risk** indicators.

Importantly, the methodology used for analyzing **risk**, and this report as well, do not define thresholds whereby certain **small water suppliers** and **self-supplied communities** are considered “at **risk**” of **drought** and **water shortage** and others are not. Instead, the methodology inherently recognizes that all communities in California face some **risk** of **drought** and **water shortage** and thus provides a tool to calculate the relative **risk** of these suppliers and communities. Future thresholds may be defined and utilized to determine which suppliers and communities are particularly at **risk** of **drought** and **water shortage**; but for now, DWR believes the State is best served by understanding the relative **risk** of its **small water suppliers** and **self-supplied communities** and, perhaps more importantly, having a common methodology for calculating **risk** that can be applied at different levels of government and in different contexts.

In total, 4,100 **small water suppliers** were examined for their relative **risk** of **drought** and **water shortage**. The results show that a vast majority of the State’s counties (52 of the 58 counties) have **small water suppliers** in the top 10th percentile of **risk** scores based on the **risk** scoring method described above. As intimated above, the 10% cut-off is not intended to be viewed as a threshold whereby **small water suppliers** scoring in the top 10% are considered at **risk** of **drought** and **water shortage** and those outside the top 10% are not at **risk**. Instead, the 10% cut off is useful for summarizing results and providing an example of how the scoring methodology can be used. The primary benefit of this scoring exercise is to offer local and regionally-specific information to assist with **drought** and **water shortage** planning. Below, are some statistics among those scoring in the top 10% **risk** that offer a snapshot of patterns notable statewide:

- 68% are in a fractured rock area, and many of these high-**risk** suppliers on fractured rock rely on groundwater
- Over half of the high-**risk** suppliers located in groundwater basins are in high subsidence areas and/or basins identified by DWR in Bulletin 118 as subject to critical conditions of overdraft.

- Over half (58%, 241) of the top at-**risk** suppliers are in high or very high-**risk** zone for wildfire, as defined by CalFire.
- To evaluate rural community **risk** (referred to as *self-supplied community risk*), 5000 Census Block Groups (the geographical unit used by the United States Census Bureau, typically between 600 and 3,000 people) with record of a domestic well (1970-2019) were examined. The results of the evaluation show that 50 of the 58 counties contain one or more Block Groups that scored within the top 10% at **risk**. Counties with the highest number of Block Groups within the top 10% include:
 - Riverside County (60 Block Groups)
 - Kern County (55 Block Groups)
 - San Diego County (33 Block Groups)
 - Tuolumne County (30 Block Groups)
 - San Luis Obispo County (24 Block Groups)
 - Stanislaus County (24 Block Groups)
 - Lake County (15 Block Groups)
 - Madera County (14 Block Groups)
 - Monterey County (14 Block Groups)
 - Siskiyou County (13 Block Groups)

To develop recommendations and guidance on **drought** planning for small water systems and **self-supplied communities**, DWR utilized a public process involving State agencies, cities, counties, small communities, **small water suppliers** and other stakeholders by forming a stakeholder advisory group, the County Drought Advisory Group (CDAG). The CDAG had many discussions on the best way to improve preparation of small communities for the next **drought**. It offered a venue and process for close collaboration between State agencies and local agencies, as well as input from other key stakeholders.

Throughout the stakeholder process the four-phase model of disaster **risk** management helped to frame the **drought** and **water shortage** planning approach: (1) Mitigation, Preparation, and **Capacity** Building; (2) Forecasting and Monitoring; (3) **Drought** and **Water Shortage** Response; and (4) Recovery and Relief (Wilhite 2000 & 2014).

State agencies and stakeholders alike agreed that additional planning requirements for the suppliers and communities for **drought** preparedness and long-term resiliency should leverage and extend existing processes when possible. The recurring theme in the recommendations in this report is to incorporate **water shortage** contingency plans into existing planning documents for **small water suppliers** serving 1,000 to 3,000 **service connections** and emergency response plans for all **small water suppliers**. Leveraging existing DWR processes to develop and implement **water shortage** contingency planning and State Water Board processes to develop and implement emergency response planning will help minimize costs to both local and State agencies.

Rural communities with water systems serving fewer than 15 **service connections** and self-supplied households are likely to be unable to perform meaningful **water shortage** planning themselves, so integrating planning within existing County plans is more feasible. Counties use a variety of tools to plan for and mitigate against future disasters and hazards; including local hazard mitigation plans, general plan elements, emergency operations plans, climate adaptation plans, Groundwater Sustainability Plans, and others. Providing counties the flexibility to use one or more of these plans is intended to leverage existing processes and organizational capacities in efforts to improve preparation for future **droughts**.

Regional planning solutions that transcend county boundaries were discussed towards the end of the CDAG stakeholder process. Further discussion is necessary to advance a holistic and regional approach for **drought** and **water shortage** planning solutions that include **urban water suppliers**, **small water suppliers** and **self-supplied communities**.

Because Tribes are sovereign governments with data and regulatory systems that are not structured within the State or Counties, their planning systems will be different. This report proposes that Indian Health Services continues to promote the **water shortage** contingency plan they developed during the last **drought**.

Technical assistance for helping approximately 250 small **community water systems**, serving 1,000 to 2,999 **service connections**, develop **water shortage** contingency plans would cost approximately \$1 to \$2 million. Additional funding would be needed to help small **community water**

systems serving less than 1,000 **service connections** and non**community water systems** that are schools for technical assistance to develop their emergency response plans and comply with minimum resiliency requirements.

The recommendations in this report, as shown in Tables 1 – 4 below, should be considered in the context of other statewide efforts around water including water resiliency, water conservation, safe and affordable drinking water, Human Right to Water, the Sustainable Groundwater Management Act, and biodiversity.

Table 1 Summary of Recommendations for Small Water Suppliers

S1. All small community water systems serving 15 to 2,999 service connections and noncommunity water system that are schools, should be required to develop an Emergency Response Plan and a drought supply evaluation to submit to the State Water Board.
S2. State Water Board should work with small community water systems serving less than 1,000 service connections and noncommunity water systems that are schools to establish minimum resiliency measures.
S3. All small community water systems serving 1,000 to 2,999 service connections should be required to develop a drought and water shortage contingency plan and coordinate with groundwater sustainability agencies where applicable.
S4. The State should provide technical assistance to small water systems on drought and water shortage planning, preparation and response.
S5. In developing a water shortage contingency plan, small water systems should use the proposed annual statewide drought and water shortage risk assessment prepared by the State, unless justifiably better data is available to improve drought and water shortage resiliency.
S6. All water suppliers should be required to provide and maintain accurate water service area boundaries on a designated site to be maintained by the State Water Board.
S7. The State should make funding available to small community water systems and noncommunity water system that are schools to install additional infrastructure to improve drought and water shortage preparedness and response (e.g., backup well, water meters).

Table 2 Summary of Recommendations for Self-supplied Communities

R1. Counties should complete drought and water shortage contingency plans for self-supplied communities, specify drought as a risk in their LHMPs, and have Emergency Operations Plans covering the entire county that include planned response to drought and water shortage conditions.
R2. The County or State should provide technical assistance to self-supplied households to improve reliability of their water supply.
R3. Update statutory requirements and guidelines for General Plans to ensure that drought resilience and water shortage contingency policies or implementation programs are incorporated into the safety element, conservation element, or other appropriate elements.
R4. Counties and regional planning agencies should use the proposed annual statewide drought and water shortage risk assessment prepared by the State to prioritize needs for drought and water shortage contingency planning.
R5. The State should improve its understanding of domestic well locations and well depths.

Table 3 Summary of Recommendations for Tribes

T1. Tribes are encouraged to develop drought and water shortage contingency plans and formally adopt them through a resolution of the Tribal Council or other Tribal authority with jurisdiction.
T2. The State should coordinate with Indian Health Services when preparing the proposed annual statewide drought and water shortage risk assessment to also include tribal water systems.

Table 4 Summary of General Recommendations

G1. The State should conduct an annual statewide drought and water shortage risk assessment and generate risk scores for each small water system, noncommunity water system that is a school, and self-supplied community using best available statewide information.
G2. Drought and water shortage contingency planning and response should be incorporated into implementation of the Safe and Affordable Drinking Water Fund.
G3. Establish a standing interagency drought and water shortage task force to facilitate proactive State planning and coordination, both for pre-drought planning and post-drought emergency response composed of Department of Water Resources, State Water Board, California Public Utilities Commission, California Office of Emergency Services and Governor’s Office of Planning and Research.

Report Pursuant to
Section 10609.42 of the California Water Code

Item #6

